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Docket No.: NGW-009RCE

Application No.: 10/623,011

REMARKS

Applicants amend claims 1 and 4 and add new claims 7-8. Support for the claim amendment can be found throughout the specification and at least at Page 13, lines 14 to Page 14, line 10, Page 17, line 20 to Page 18, line 2. No new matter is added. Upon entry of this amendment, claims 1-8 are pending, of which claims 1 and 4 are independent. Applicants respectfully submit that the pending claims define over the art of record.

Applicants thank the Examiner for conducting a telephone interview with Applicants' attorney. During the telephone interview, the Examiner agreed that the prior art reference does not teach or suggest the dynamic change in the threshold value during operation of the fuel cell. Applicants amend the claims to reflect the dynamic change in the threshold value during operation of the fuel cell.

Rejection Under 35 U.S.C. §102

Claims 1-6 are rejected under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, 35 U.S.C. §103(a) as being obvious over United States Patent No. 6,461,751 to Boehm (hereafter "Boehm"). Applicants respectfully submit that the Boehm reference does not teach or suggest a determination threshold value which is *dynamically set* according to the operating state of the fuel cell *during operation of the fuel cell*, as recited in independent claims 1 and 4.

The Examiner alleges that the Boehm reference teaches the limitation of "the determination threshold value decreases according to a loaded state of the fuel cell" at Col. 5, lines 5-10. The cited section teaches that the oxidant stoichiometry is decreased when the hydrogen gas concentration is less than a first threshold concentration and that the oxidant stoichiometry is increased when the hydrogen gas concentration is higher than a second threshold concentration. The Examiner alleges that because the first threshold concentration and second threshold concentration are different threshold values that are used to compare with a hydrogen gas concentration, the limitation that the determination threshold value decreases when a loaded state of the fuel cell decreases is taught. Applicants respectfully disagree.

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The Boehm reference uses both the first threshold concentration and the second threshold concentration at all times to determine if the oxidant stoichiometry needs to be increased or decreased and that the value of the first and second threshold concentration does not change according to an operating state of the fuel cell during operation of the fuel cell. In other words, the Boehm reference teaches several different thresholds, each having a fixed value. In contrast, the claimed invention refers to a single threshold whose value can *change during operation of the fuel cell* according to the operating state of the fuel cell and in fact, the value of the threshold tends to decrease as a loaded state of the fuel cell decreases.

Applicants respectfully submit the Boehm reference does not teach or suggest a determination threshold value which is *dynamically set* according to the operating state of the fuel cell *during operation of the fuel cell*, as recited in independent claims 1 and 4. Applicants respectfully request that the Examiner reconsider and withdraw the rejection of independent claims 1 and 4.

Applicants note that the dependent claims also recite patentable subject matter. As such, for this and the reasons set forth above, Applicants respectfully submit that the dependent claims also define over the art of record.

New Claims

New dependent claims 7 and 8 are added to recite that the operating state of the fuel cell includes a differential pressure between the reaction gases at the anode and the cathode, a supply pressure of at least one of the reaction gasses, a supply flow rate of at least one of the reaction gases, or a generated current of the fuel cell. Applicants respectfully submit that the Boehm reference fails to teach or suggest the limitation that the operating state of the fuel cell includes a differential pressure between the reaction gases at the anode and the cathode, a supply pressure of at least one of the reaction gasses, a supply flow rate of at least one of the reaction gases, or a generated current of the fuel cell. As such, for this and the reasons set forth above, Applicants respectfully submit that new claims 7-8 also define over the art of record.

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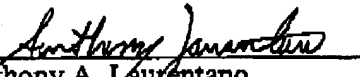
CONCLUSION

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Applicants submit herewith a Request for Continued Examination. Applicants believe no additional fee is due with this statement. However, if an additional fee is due, please charge our Deposit Account No. 12-0080, under Order No. NGW-009RCE from which the undersigned is authorized to draw.

Dated: February 15, 2007

Respectfully submitted,

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